

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM PERMIT
MI-017-1I-C003

FACT SHEET

Liquid Management, Inc. Class I Commercial Non-Hazardous PCDW #1 in Bay County, Michigan

Introduction

Liquid Management, Inc. of Bay City, Michigan has applied to the United States Environmental Protection Agency (USEPA) for a permit to operate a Class I injection well located in Bay County, Michigan for the disposal of non-hazardous liquid waste.



Facility Background

The Class I non-hazardous waste injection well is used for the disposal of produced brine and liquid waste from the cheese factory. The construction of the PCDW #1 injection well meets the regulatory criteria of 40 CFR §146.12. This requires that all Class I wells be sited in such a fashion that they inject into a formation which is beneath the lowermost formation containing an underground source of drinking water. All Class I wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water.

Site Geology

The injection zone is the Sylvania Sandstone from 4845 feet to 4950 feet below the surface. The immediate overlying confining zone is the Detroit River Group and Traverse Group which is composed of Carbonaceous Limestone and dark-brown Dolomite, Shale, and Sandstone. Adequate confining layers exist between the Sylvania Sandstone formation and the base of the lowermost Underground Source of Drinking Water.

Underground Sources of Drinking Water (USDW): A USDW is defined as any aquifer or portion thereof which contains less than 10,000 milligrams per liter of total dissolved solids and which is being or can be used as a source of drinking water. The base of the lowermost USDW has been identified at a depth of 294 feet below the surface. This water-bearing formation is the Glacial Drift.

Operational Parameters

Area of review (AOR): The AOR is defined as the area within a 2-mile radius of the injection well. It has been determined that there are 1 producing, 1 injection, 1 temporarily abandoned, and 39 plugged and abandoned wells that penetrate the confining zone within the AOR.

Maximum Injection Pressure: The proposed permitted maximum injection pressure shall be limited to 1369 pounds per square inch gauge (psig).

Financial Assurance: Liquid Management, Inc. has demonstrated adequate financial resources to plug and abandon this well by means of Michigan Department of Environmental Quality (MDEQ) Bond For Conformance, in the amount of 15,000.00, with Greenwich Insurance Company, 5201 Eagleview Blvd., P.O. Box 636, Exton, PA 19341-0636.

Intent to Issue a Permit

Review of the permit application indicates that no significant environmental impact should result from the issuance of this permit. In accordance with the provisions of the Safe Drinking Water Act, as amended (42 U.S.C. 300f et seq., commonly known as the SDWA) and attendant regulations incorporated by the USEPA under Title 40 of the Code of Federal Regulations at Parts 124, 144, 146, and 147, the USEPA intends to issue a permit for the injection well.

Public Comments

Copies of the draft permit and administrative record for this permit action are available for public review between 9 a.m. and 4 p.m. at the address listed below. It is recommended that you telephone Mirza M. Baig at (312) 886-2255 before visiting the Region 5 office:

**U.S. Environmental Protection Agency (WU-16J)
Direct Implementation Section
(Attn: Lisa Perenchio, Chief)
77 West Jackson Blvd.
Chicago, Illinois 60604-3590**

The dates of the public comment period for the draft permit will be published in the Bay City Times. If significant written comments are received within thirty (30) days of the date of the newspaper publication, a public hearing may be scheduled. If a public hearing is scheduled, a notice of the hearing will be published at least 30 days in advance.

Part C of the SDWA specifically mandates regulation of the underground injection of fluids through wells to assure that the quality of the underground sources of drinking water is protected. Section 1421 of the SDWA requires the USEPA to administer underground injection control (UIC) programs in the states which do not have approved UIC programs. Michigan has not acquired primacy over the UIC program for Class I injection wells, therefore USEPA is administering the permit program pursuant to regulations at 40 CFR Part 147.

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U.S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PERMIT: CLASS I NON-HAZARDOUS

Permit Number: MI-017-1I-C003

Facility Name: PCDW #1

Pursuant to the Underground Injection Control regulations of the U.S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations (40 CFR), Parts 124, 144, 146, and 147,

Liquid Management, Inc. of Bay City, Michigan

is hereby authorized to construct and operate a commercial Class I Non-hazardous injection well located in Michigan, Bay County, T17N, R4E, Section 23, SW Quarter Section, for injection into the Sylvania Sandstone at depths between 4845 feet and 4950 feet upon the express condition that the permittee meet the restrictions set forth herein.

All references to 40 CFR are to all regulations that are in effect on the date that this permit is effective. The following attachments are incorporated into this permit: A, B, C, D, E, F, G and H.

This permit shall become effective on _____ and shall remain in full force and effect during the life of the permit, unless this permit is revoked, terminated, modified or reissued pursuant to 40 CFR 144.39, 144.40 or 144.41.

This permit and authorization to inject shall expire at midnight on _____, unless terminated prior to the expiration date.

Signed and Dated _____

DRAFT

Jo Lynn Traub
Director, Water Division

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. Notwithstanding any other provisions of this permit, the permittee authorized by this permit shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection, annulus or formation fluids into underground sources of drinking water (USDWs). The objective of this permit is to prevent the introduction of contaminants into USDWs if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. For purposes of enforcement, compliance with this permit during its term constitutes compliance, with Part C of the Safe Drinking Water Act (SDWA). Such compliance does not constitute a defense to any action brought under Section 1431 of the SDWA, or any other common or statutory law other than Part C of the SDWA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination - The Director of the Water Division of the United States Environmental Protection Agency (USEPA), hereinafter, the Director, may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR 144.12, 144.39, and 144.40. Also, the permit is subject to minor modifications for cause as specified in 40 CFR 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.
2. Transfer of Permits - This permit is not transferable to any person except in accordance with 40 CFR 144.38.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other

circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and Section 144.5, any information submitted to the USEPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the USEPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee; and
2. Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply - The permittee shall comply with all applicable Underground Injection Control (UIC) Program regulations and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with 40 CFR 144.34. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application.
2. Penalties for Violations of Permit Conditions - Any person who violates a permit requirement is subject to civil penalties, fines and other enforcement action under the SDWA. Any person who willfully violates permit conditions may be subject to criminal prosecution.
3. Continuation of Expiring Permits
 - (a) Duty to Reapply - If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 calendar days before this permit expires.
 - (b) Permit Extensions - The conditions of an expired permit may continue in force in accordance with 5 U.S.C. 558 (c) 40 CFR 144.37.

- (c) Effect - Permits continued under 5 U.S.C. 558(c) and 40 CFR 144.37 remain fully effective and enforceable.
 - (d) Enforcement - When the permittee is not in compliance with the conditions of the expiring or expired permit, the Director may choose to do any or all of the following:
 - (1) Initiate enforcement action based upon the permit which has been continued;
 - (2) Issue a notice of intent to deny the new permit in which case, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operation without a permit;
 - (3) Issue a new permit under 40 CFR Part 124 with appropriate conditions; or
 - (4) Take other actions authorized by the UIC regulations.
 - (e) State Continuation - A USEPA-issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement responsibility under the SDWA. A State authorized to administer the UIC program may continue either USEPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit. Furthermore, if the State does not continue the USEPA permit upon obtaining primary enforcement responsibility, the permittee must obtain a new State permit or be authorized to inject by State rule. Failure to do so while continuing to operate the well constitutes unauthorized injection and is a violation subject to enforcement action.
- 4. Need to Halt or Reduce Activity Not a Defense - It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - 5. Duty to Mitigate - The permittee shall take all timely and reasonable steps necessary to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
 - 6. Proper Operation and Maintenance - The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed

or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information - The permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
8. Inspection and Entry - The permittee shall allow the Director or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter, at reasonable times, upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any facilities, equipment or operations regulated or required under this permit.
9. Records
 - (a) The permittee shall retain records and all monitoring information, including all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least three (3) years from the date of the sample, measurement or report, unless these materials are submitted to the Director as part of reporting requirements under this permit.

- (b) The permittee shall maintain records of all data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR 144.27, 144.28, and 144.31 for a period of at least three (3) years from the date the application was signed.
 - (c) The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of plugging and abandonment.
 - (d) The retention period specified in Part I(E) (9) (a) through (c) of this permit may be extended by request of the Director at any time. The permittee shall continue to retain records after the retention period specified in Part I(E) (9) (a) through (c) of this permit or any requested extension thereof expires unless the permittee delivers the records to the Director or obtains written approval from the Director to discard the records.
 - (e) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) A description of both methodology and the handling of samples per the waste analysis plan;
 - (4) The date(s) analyses were performed;
 - (5) The name(s) of individual(s) who performed the analyses;
 - (6) The analytical techniques or methods used; and
 - (7) The results of such analyses.
10. Monitoring - Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall use the methods described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (available from Solid Waste Information, USEPA, 26 W. St. Claire St., Cincinnati, Ohio 45268), or equivalent methods approved by the Director, to take representative samples. Monitoring results shall be reported at the intervals contained in Part II(D) (1) through (3) and Part III(A) of this permit.

- (a) Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited and described in Table I of 40 CFR 136.3 or in certain circumstances by other methods that have been approved by the Director.
 - (b) Sampling and analysis shall comply with the specifications of the Waste Analysis Plan required in Part II(C) (3) of this permit.
- 11. Signatory Requirements - All reports or other information, required to be submitted by this permit or requested by the Director shall be signed and certified in accordance with 40 CFR 144.32.
- 12. Reporting Requirements
 - (a) Planned Changes - The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility other than minor repair/replacement maintenance activities.
 - (b) Anticipated Noncompliance - The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
 - (C) Compliance Schedules - Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted by the permittee no later than thirty (30) calendar days following each schedule date.
 - (d) Twenty-four Hour Reporting
 - (1) The permittee shall report to the Director any permit noncompliance which may endanger human health or the environment. See, e.g., Part I(G) (5) of this permit. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. Such reports shall include, but not be limited to the following information:
 - (i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW; and
 - (ii) Any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between USDWs; and

- (iii) Any failure to maintain mechanical integrity.
- (2) A written submission shall also be provided within five (5) working days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.
- (e) Other Noncompliance - The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part I(E) (12) (d) (2) of this permit.
- (f) Other Information - When the permittee becomes aware of failure to submit any relevant facts in the permit application or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts or corrected information within ten (10) calendar days.
- (g) Report on Permit Review - Within thirty (30) calendar days of receipt of this permit, the permittee shall certify to the Director that he or she has read and is personally familiar with all terms and conditions of this permit.

F. PLUGGING AND ABANDONMENT

- 1. Notice of Plugging and Abandonment - The permittee shall notify the Director at least sixty (60) calendar days before conversion or abandonment of the well. At the discretion of the Director, a shorter notice period may be allowed.
- 2. Plugging and Abandonment - The permittee must receive the approval of the Director before plugging the well and shall plug and abandon the well consistent with 40 CFR 144.52(a) (6) and 146.10, as provided for in the Plugging and Abandonment Plan contained in Part III(B) of this permit. Within sixty (60) calendar days after plugging a well, the permittee shall submit a Plugging and Abandonment report to the Director. The report shall be certified as accurate by the permittee and by the person who performed the plugging operation (if other than the permittee), and shall consist of either:
 - (a) A statement that the well was plugged in accordance with the Plugging and Abandonment Plan previously approved by the Director; or

- (b) If the actual plugging differed from the approved plan, a statement defining the actual plugging and explaining why the Director should approve such deviation. If the Director determines that a deviation from a previously approved plan may endanger underground sources of drinking water, the permittee shall replug the well as required by the Director.
- 3. Temporary Abandonment - If the permittee ceases injection into the well for twenty-four (24) consecutive months, the well is considered to be in temporary abandoned status, and the permittee shall plug and abandon the well in accordance with the approved plan and 40 CFR 144.52 (a) (6), or make another demonstration of non-endangerment (e.g., a standard annulus pressure test). During any periods of temporary abandonment or disuse, the well will be tested to ensure that it maintains mechanical integrity. Demonstrations of non-endangerment/testing will be due every two years from the last successful test (unless the permit requires more frequent demonstrations of mechanical integrity). If the well loses mechanical integrity prior to the next test due date, then the well must either be plugged or repaired and retested within 30 days of losing mechanical integrity. The permittee shall continue to comply with the conditions of this permit, including all monitoring and reporting requirements according to the frequencies outlined in the permit unless an exception to such requirements is granted, in writing, by the Director.
- 4. Revision of Plugging and Abandonment Plan - If the permittee finds it necessary to change a Plugging and Abandonment Plan, a revised plan shall be submitted to the Director for approval at the time of the next monthly report.
- 5. Standards for Well Closure - Prior to plugging and abandoning the well:
 - (a) The permittee shall observe and record the pressure decay for a time specified by the Director and shall report this information to the Director.
 - (b) The permittee shall conduct appropriate mechanical integrity testing to ensure the integrity of that portion of the long string casing and cement that will be left in the ground after closure. Testing methods may include:
 - (1) Pressure tests with liquid;
 - (2) Noise, temperature, pipe evaluation, or cement bond logs; or

(3) Any other test required by the Director.

(c) Prior to well closure, the well shall be flushed with a buffer fluid.

G. MECHANICAL INTEGRITY

1. Standards - The injection well must have and maintain mechanical integrity consistent with 40 CFR 146.8(a)(1) and (2). Mechanical integrity demonstrations must be witnessed by an authorized representative of the Director. Mechanical integrity testing may also be conducted without an EPA authorized representative when it is not possible for the UIC Branch to resolve scheduling conflicts with both USEPA contract inspectors and the regional technical staff. In order to ensure that unwitnessed test will be properly conducted, the permittee will be required to submit test procedures to the UIC Branch for review and wait for written approval from the UIC Branch prior to testing.
2. Periodic Mechanical Integrity Testing [§146.8] - The permittee shall conduct the mechanical integrity testing as follows:
 - (a) Long string casing, injection tubing and annular seal shall be tested by means of an approved pressure test in accordance with 40 CFR 146.8(b)(2). This test shall be performed upon completion of this well, and at least once every twelfth month beginning with the date of the last approved demonstration and whenever there has been a well workover in which tubing is removed from the well, the packer is reset, or when loss of mechanical integrity becomes suspected during operation;
 - (b) An approved temperature, noise, oxygen activation, or other approved log shall be run upon completion of this well and at least once every sixty (60) months from the date of the last approved demonstration to test for movement of fluid along the bore hole. The Director may require such tests whenever the well is worked over. The permittee must submit logging procedures to the Director for approval before running logs for the purpose of meeting this requirement.
 - (c) The permittee may request the Director to use any other test approved by the Director in accordance with the procedures in 146.8(d).
3. Prior Notice and Reporting - The permittee shall notify the Director of his or her intent to demonstrate mechanical integrity at least thirty (30) calendar days prior to such demonstration. At the discretion of the Director a shorter time period may be allowed.

Reports of mechanical integrity demonstrations which include logs must include an interpretation of results by a knowledgeable log analyst. The permittee shall report the results of a mechanical integrity demonstration within forty-five (45) calendar days or with the next quarterly report after completion thereof.

4. Gauges - The permittee shall calibrate all gauges used in mechanical integrity demonstrations to an accuracy of not less than one-half (0.5) percent of full scale, prior to each required test of mechanical integrity. A copy of the calibration certificate shall be submitted to the Director or his or her representative at the time of demonstration and every time the gauge is calibrated. The gauge shall be marked in no greater than five (5) psi increments. The Densitometer shall be calibrated using an air check or liquid check every twelve (12) months in accordance with manufacturers' recommendation.
5. Loss of Mechanical Integrity - If the permittee or the Director finds that the well fails to demonstrate mechanical integrity during a test, or fails to maintain mechanical integrity during operation, or that a loss of mechanical integrity as defined by 40 CFR 146.8(a) (1) and (2) is suspected during operation, the permittee shall halt the operation immediately and follow the reporting requirements as directed in Part I(E) (12) of this permit. The permittee shall not resume operation until mechanical integrity is demonstrated and the Director gives approval to recommence injection.
6. Mechanical Integrity Testing on Request From Director - The permittee shall demonstrate mechanical integrity at any time upon written notice from the Director.

H. FINANCIAL RESPONSIBILITY

1. Financial Responsibility - The permittee shall maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner consistent with 40 CFR 144.52(a) (7). The approved financial assurance mechanism is found in Part III(c) of this permit.
 - (a) The permittee must maintain a written cost estimate, in current dollars, for the Plugging and Abandonment Plan as specified in 40 CFR 146.10. The plugging and abandonment cost estimate at any point in the life of the facility operation must equal the maximum cost of plugging and abandonment at that time.
 - (b) The permittee must revise the plugging and abandonment cost estimate whenever a change in the Plugging and Abandonment

Plan increases the cost of plugging and abandonment. For required annual updates of the cost estimate, an inflation factor will be applied to the previous estimate or an independent estimate may be used to establish the current Plugging and Abandonment cost.

- (c) If the revised plugging and abandonment estimate exceeds the current amount of the financial assurance mechanism, the permittee shall submit a revised mechanism to cover the increased cost within thirty (30) calendar days after the revision specified in Part I(H) (1) (b) of this permit.
- 2. Insolvency - The permittee must notify the Director within ten (10) business days of any of the following events:
 - (a) The bankruptcy of the trustee or issuing institution of the financial mechanism; or
 - (b) Suspension or revocation of the authority of the trustee institution to act as trustee; or
 - (c) The institution issuing the financial mechanism losing its authority to issue such an instrument.
- 3. Notification - The permittee must notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he or she is named as debtor, as required under the terms of the guarantee.
- 4. Establishing Other Coverage - The owner or operator must establish other financial assurance or liability coverage acceptable to the Director, within sixty (60) calendar days of the occurrence of the events in Part I(H) (2) or (H) (3) of this permit.

I. CORRECTIVE ACTION

- 1. Compliance - The permittee shall comply with the plan for contingency corrective action which is found in Part III (D) of this permit and with 40 CFR 144.55 and 146.7.
- 2. Corrective Action Plan - The permittee shall file a Corrective Action Plan for approval by the Director within thirty (30) days of a written determination by the Director that improperly plugged, completed, or abandoned wells, or wells for which plugging or completion information is unavailable, are present in the area of

review and penetrate the confining zone of the permitted well, as defined in the administrative record for this permit.

3. Prohibition of Movement of Fluids into USDWs [§144.12] Should upward migration of fluids through the confining zone of this permitted well be discovered within the two mile area of review, and should this migration of fluids cause the introduction of any contaminant into a USDW pursuant to 40 CFR 144.12, the permittee shall immediately cease injection into this well until the situation has been corrected and reauthorization to inject has been given by the Director.

PART II
WELL SPECIFIC CONDITIONS FOR UIC PERMITS

A. CONSTRUCTION

1. Siting [§146.12(a)] - The injection well shall inject only into the formation at the depths listed on the cover page of this permit. At no time shall injection occur into a formation which is or is above the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water.
2. Casing and Cementing [§146.12(b)] - Notwithstanding any other provisions of this permit, the permittee shall case and cement the well in such a manner so as to prevent the movement of fluids into or between USDWs for the expected life of the well. The casing and cement used in the construction of this well are shown in Part III(E) of this permit and in the administrative record for this permit. Any change shall be submitted for approval by the Director before installation.
3. Tubing and Packer Specifications [§146.12(c)] - The permittee shall inject only through tubing with a packer set within the long string casing at a point within or below the confining zone. The tubing and packer used in the well are represented in engineering drawings contained in Part III(E) of this permit.
4. Wellhead Specification [§144.51(i)(4)] - The permittee shall install and maintain a female coupling and valve on the wellhead, to be used for independent injection pressure readings.

B. OPERATIONS [§146.13]

1. Injection Pressure Limitation - Except during stimulation, the permittee shall not cause or permit the injection pressure at the wellhead to exceed the maximum limitation which is specified in Part III(A) of this permit. In no case shall injection pressure initiate fractures or propagate existing fractures in the confining zone or cause the movement of injection or formation fluids into a USDW.
2. Additional Injection Limitation - No waste streams other than those identified in Part III(F) of this permit shall be injected. Every twelfth month the permittee shall submit a certified statement attesting to compliance with this requirement.
3. Annulus Fluid and Pressure - The permittee shall fill the annulus between the tubing and the long string casing with a fluid approved by the Director and identified in the administrative record of this

permit. Any change in the annulus fluid, except during workovers or times of annulus maintenance, shall be submitted by the permittee for the approval of the Director before replacement. Except during workovers, the permittee shall maintain a positive pressure on the annulus as specified in Part III(A) of this permit.

4. Annulus/Tubing Pressure Differential - Except during workovers or times of annulus maintenance, the permittee shall maintain, over the entire length of the tubing, a pressure differential between the tubing and annulus as specified in Part III(A) of this permit.
5. Automatic Warning and Automatic Shut-off System - The permittee shall continuously operate and maintain an automatic warning and automatic shut-off system to stop injection within fifteen (15) minutes of any of the following situations:
 - (a) Pressure changes in the annulus or annulus/tubing differential signifying or identifying possible deficiencies in mechanical integrity; or
 - (b) Injection pressure, annulus pressure, or annulus/tubing differential pressure reaches the pressure limits as specified in Part III(A) of this permit.

The permittee must test the automatic warning and automatic shut-off system at least once every twelfth month. This test must involve subjecting the system to simulated failure conditions and must be witnessed by the Director or his or her representative, unless alternative arrangements are approved by the Director. Unless a trained operator is present on site property who is able to perceive shut-down alarms and is able to respond to the well controls or the wellhead within fifteen (15) minutes of a compliance alarm condition at all times when the well is operating, the special permit conditions related to the remote monitoring of the well in Part (H) of this permit shall apply.

6. Precautions to Prevent Well Blowouts -
 - (a) In order to prevent the migration of fluids into underground sources of drinking water, the permittee shall maintain on the well at all times during workovers, a pressure which will prevent the return of the injection fluid to the surface. If there is gas formation in the injection zone near the well bore, such gas must be prevented from entering the casing or tubing. The well bore must be filled with a high specific gravity fluid during workovers to maintain a positive (downward) gradient and/or a plug shall be installed which can resist the pressure differential. If the potential for blowout exists, a blowout preventer must be kept in proper

operational status during workovers. In cases where the injected wastes have the potential to react with the injection formation to generate gases, the permittee shall follow the procedures below to assure that a backflow or blowout does not occur:

- (1) Limit the temperature, pH or acidity of the injected waste; and
- (2) Develop procedures necessary to assure that pressure imbalances do not occur.

C. MONITORING

1. Sampling Point - The injection fluid samples shall be taken at the sampling location as specified in Part III(A) of this permit.
2. Continuous Monitoring Devices - The permittee shall maintain continuous monitoring devices and use them to monitor injection pressure, flow rate, and the pressure on the annulus between the tubing and the long string of casing. If the well is equipped with a fluid level indicator, the permittee shall monitor the fluid level daily. The monitoring results shall be submitted to the Director as specified in Part II(D) of this permit. The permittee shall maintain for our inspection at the facility an appropriately scaled, continuous record of these monitoring results as well as original copies of any digitally recorded information pertaining to these operations.
3. Waste Analysis Plan [§144.52(a)(5)] - The permittee shall comply with the written Waste Analysis Plan which describes the procedures used to monitor the nature of injected fluids and the procedures which will be carried out to comply with Part (I)(E)(10) of permit. A copy of the approved plan shall also be kept at the facility.
4. Ambient Monitoring [§146.13(d)(1)] - The permittee shall monitor the pressure buildup in the injection zone at least once every twelfth month from the last approved demonstration, including at a minimum, a shut down of the well for a time sufficient to conduct a valid observation of the pressure fall-off curve. From this observation, the permittee shall submit a report including at least a calculation of pressure build-up in the injection zone, injection zone transmissivity, and wellbore skin factor.
5. Establishing Monitoring and Reporting Frequency - Monitoring and reporting requirements shall be consistent with 40 CFR Subpart B requirements for fluids appropriate for injection into Class I non-hazardous injection wells.

D. REPORTING REQUIREMENTS [§146.13(c)]

The permittee shall submit all required reports to the Director at:

United States Environmental Protection Agency
77 West Jackson Boulevard (WU-16J)
Chicago, Illinois 60604-3590
ATTN: UIC Branch, DI Section

1. Monthly Reports - The permittee shall submit monthly reports of the following information no later than the end of the month following the reporting period:
 - (a) Waste analysis results per the approved waste analysis plan. Laboratory reports must be submitted with the first monthly monitoring report following their receipt by the operator.
 - (b) A tabulation of maximum injection pressure, a daily measurement of annulus tank fluid level, and minimum differential between simultaneous measurements of injection pressure and annulus pressure for each day of the month;
 - (c) Appropriately scaled graphs showing injection pressure and flow rate and annulus tank fluid level. One graph must include, at a minimum, daily maximum injection pressure and daily average flow rate, on a single, monthly chart;
 - (d) A statement of the total volumes of the fluid injected to date, in the current calendar year, and the current month;
 - (e) A tabulation of the dates, amounts and types of liquid added to or removed from the annulus system during the month, and the cumulative additions and cumulative subtractions for the current month and each of the past 12 months;
 - (f) Any noncompliance with conditions of this permit, including but not limited to:
 - (1) Any event that exceeds operating parameters for annulus pressure or injection pressure or annulus/tubing differential as specified in the permit; or
 - (2) Any event which triggers an alarm or shutdown device required in Part II(B) (5) of this permit.
2. Quarterly Reports - The permittee shall report the following at least every Quarter (quarterly reporting periods shall begin on the first day of January, April, July, and October of each year).

- (a) Results of the injection fluid analyses specified in Parts III (A) and (G) of this permit, if applicable. Laboratory reports must be submitted with the first monthly monitoring report following the close of the quarterly reporting period.
 - (b) Part III (A) of this permit specifies the method for determining reporting of sampling and analysis more frequent than quarterly.
- 3. Annual Reports - The permittee shall report the following at least every twelfth month:
 - (a) Results of the injection fluid analyses specified in the approved waste analysis plan as recorded in the administrative record for this permit as applicable. This report must include statements showing that the requirements of Part I(E) (10), Part II(B) (2) and Part II(C) (3) have been met;
 - (b) Results of ambient monitoring required by 40 CFR 46.13(d) (1) and Part II(C) (4) of this permit; and
- 4. Reports on Well Tests and Workovers - Within forty-five (45) calendar days after the activity, the permittee shall report to the Director the results of demonstrations of mechanical integrity, any well workover, and/or results of other tests required by this permit.

PART III
ATTACHMENTS

These attachments include, but are not limited to, permit conditions and plans concerning operating procedures, monitoring and reporting, as required by 40 CFR Parts 144 and 146. The permittee shall comply with these conditions and adhere to these plans as approved by the Director, as follows:

- A. SUMMARY OF OPERATING, MONITORING, REPORTING REQUIREMENTS
AND WASTE ANALYSIS (ATTACHED)
- B. PLUGGING AND ABANDONMENT PLAN (ATTACHED)
- C. FINANCIAL ASSURANCE MECHANISM (ATTACHED)
- D. CONTINGENT CORRECTIVE ACTION (ATTACHED)
- E. CONSTRUCTION DETAILS (ATTACHED)
- F. SOURCE AND ANALYSIS OF WASTE (ATTACHED)
- G. LIST OF PRESENTLY APPROVED SOURCES (ATTACHED)
- H. REMOTE OPERATION (ATTACHED)

ATTACHMENT A

SUMMARY OF OPERATING, MONITORING AND REPORTING REQUIREMENTS

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

ATTACHMENT A

SUMMARY OF OPERATING, MONITORING AND REPORTING REQUIREMENTS

CHARACTERISTIC	LIMITATION	MINIMUM MONITORING FREQUENCY	MINIMUM REPORTING FREQUENCY
Injection Pressure	1369 psig maximum*	continuous	monthly
Annulus Pressure	100 psig minimum	continuous	monthly
Annulus/Tubing Differential	100 psig minimum above operating injection pressure	continuous	monthly
Flow Rate		continuous	monthly
Sight Glass Level		daily	monthly
Cumulative Volume		continuous	monthly
Annulus Fluid Loss		monthly	monthly
Chemical Composition of Injected Fluids**		**	*** monthly
Physical Characteristics of Injected Fluids**		**	***

Sampling Location: For new Class I sources, at the site of generation. For approved Class I sources or any Class II sources, at the site of generation, at the unloading pad, the storage tanks or at wellhead.

*This limitation was calculated using the following formula:

$(FPG \text{ psi/ft} - 0.433 \text{ psi/ft} \times SG) \times D \text{ ft} - 14.7 \text{ psi}$, where:
FPG = .75 psi/ft = fracture pressure gradient, 0.433 = liquid pressure gradient of fresh water, SG = 1.073 = maximum specific gravity of injected fluid, D = 4845 feet = depth to the top of the injection zone 14.7 = atmospheric pressure (to convert absolute pressure to gauge pressure).

The fracture pressure gradient was determined by site specific testing of the injection zone. The Sylvania Sandstone at 4845 was used as the depth and a specific gravity of was used for the injected fluid. The limitation on injection pressure will serve to prevent injection-formation fracturing.

**As specified in the Sampling and Analysis Plan, found in the administrative record for this permit. At a minimum, this analysis shall include, but not be limited to, the following: Temperature, Specific Conductance, pH and Specific Gravity.

***All required analytical results will be submitted within 30 days of the sampling period, as specified in Part III(F) of this permit.

PROPOSED NEW WASTE "SOURCE" INFORMATION

The information shown in Subparts A through E of this Attachment must be submitted by the permittee initially for each proposed waste "source" from generators, pursuant to Part II(B) (2) of this permit. These requirements do not apply to existing wastes generated by the on-site plant operations at the facility and otherwise documented in this permit and the applicable permit application. The permittee may incorporate the information into a form of its own, provided that all information is included, and that the same form is used for all proposed "sources". The permittee, by submitting appropriate knowledge of waste, shall specify that there are no hazardous wastes as defined at 40 CFR §§ 261.30-33 present in each proposed "source". Appropriate knowledge of waste may consist of any or all of the following three categories: (1) knowledge of the waste generation process, (2) detailed record-keeping, or (3) waste analysis data. The permittee must receive written authorization from the USEPA prior to injecting waste from this "source". Authorization shall consist of a final minor-modified permit, which shall list this "source" as an approved "source" in Part III(G) of this permit.

For proposed additional non-hazardous waste "sources", reporting of annual, and/or quarterly and/or monthly sampling and analysis shall be required, as specified in Part II(D) (2) of this Permit. Certain waste "sources" may require more stringent sampling and analysis. Any more stringent requirements will be specified for each specific "source" in the initial approval letter granting approval of the minor-modification to the permit for that "source". Upon receiving the minor-modified permit, the permittee shall be authorized to inject this waste, subject to the conditions of this permit and the permittee's approved waste analysis plan. The USEPA will make every reasonable effort to expedite the administrative processing of minor permit modifications.

A. Permittee Information

- 1) Owner/Operator Name
- 2) Owner/Operator Address (Street, City, State, Zip Code)
- 3) Facility contact name and telephone number
- 4) Well Location (Township, Range, Section, Quarter Section, footage NSL, EWL)
- 5) USEPA UIC Permit Number
- 6) State Permit Number (if applicable)
- 7) Well Name

B. Proposed Generator ("Source") Information

For Non-Hazardous New Waste "Sources" Only:

- 1) "Source" Identification number
- 2) Generator Name
- 3) Generator Address (Street, City, State, Zip Code)
- 4) Generator Contact Name and telephone number
- 5) USEPA Identification numbers (if applicable)

For Oilfield Waste "Sources" Only:

- 1) "Source" Identification number
- 2) Oilfield Name
- 3) Location (Township, Range, and Section)
- 4) Geologic Formation

The "Source" identification number shall be a unique number assigned by the permittee to the waste generator at the site specified above.

C. Waste "Source" Characterization

- 1) Sample analysis results, as specifically applicable to each approval, which include:
 - a) Corrosivity
 - b) Reactivity
 - c) Ignitability
 - d) Toxicity
 - e) Conductivity
 - f) Specific Gravity
 - g) All other constituents which are indicated by the generator as constituting a major portion of the waste stream (i.e., greater than 0.01 percent by mass).

Any testing conducted to evaluate toxicity shall follow the Toxicity Characteristic Leaching Procedure and should include all appropriate constituents based on each individual "Source" (which are listed at 40 CFR §261.24). If the permittee decides to rely on the generator's waste knowledge to test for fewer than the complete toxicity parameter list found at 40 CFR §261.24, the permittee must submit an explanatory statement which is consistent with 40 CFR §262.11 along with the request for approval of the new source to justify why those parameters were not tested for. If the permittee decides not to analyze any new proposed source for corrosivity, reactivity and/or ignitability, then the permittee must submit an explanatory statement consistent with 40 CFR §262.11 to justify the waiver.

- 2) Any appropriate analytical results necessary to identify waste constituents which may indicate a listed hazardous waste as defined at 40 CFR §§ 261.31, 261.32, or 261.33.

If the permittee decides to rely on the generator's waste knowledge to test for fewer than the complete toxicity parameter list found at 40 CFR §261.24, the permittee must submit an explanatory statement which is consistent with 40 CFR §262.11 along with the request for approval of the new source to justify why those parameters were not tested for.

3) Sampling and Analysis Description

The following information must be specified for each sampling event:

- a) Sample collector, title, and employer
- b) Sample collection method and preservation technique
- c) Sample collection point

The following information must be specified for each parameter:

- d) Analytical method for parameter detection/quantification
- e) Analytical method accuracy
- f) Upper and lower analytical method quantification limits

D. Quality Assurance and Quality Control (QA/QC)

1) A description of the following QA/QC Protocol followed:

- a) Equipment cleaning blanks (if any)
- b) Trip blanks (if any)
- c) Sample duplicates (if any)
- d) Chain of custody
- e) Equipment calibration
- f) Data reduction and validation

These requirements are specified in the QA/QC portion of the permittee's waste analysis plan.

2) A letter from the permittee which describes the following:

How the waste was determined to be nonhazardous.

E. Historical background of facility

Historical background of the facility, including a detailed description of the process involved in generating the waste, how it is collected and stored. Indicate whether the proposed waste "source" is a one-time "source". The description should identify any periodic changes in facility operations which would be expected to alter the composition of the waste stream. The purpose of this information shall be to assure that the monitoring frequency applied to each "source" accounts for changes in the nature of the waste due to changes in facility operations. If a change in operations causes a change in the waste stream, the permittee must require monitoring which is representative of ongoing operations. Monitoring data supplied by the facility must be representative of the waste being generated for the entire period between sampling events.

F. Periodic Monitoring of Approved "Sources"

All approved oilfield wastes shall be monitored at a minimum for the following parameters: Sodium, Calcium, Barium, Total Iron, Chloride, Sulfate, Carbonate, Bicarbonate, Sulfide, Total Dissolved Solids, pH, Resistivity (ohm-meters @ 75°) and Specific Gravity.

Fingerprint Analysis

Fluid sampling for all wastes that require fingerprint analysis as specified in Part III (G) of this permit shall only be applicable during the month in which waste from a particular source is injected into the well, and at a minimum, be subject to tests for the following:

pH,

Flashpoint,

Total Suspended Solids,

Conductivity,

Specific Gravity,

and any other analyses deemed appropriate for characterizing the injected waste as specified in the request for approval or the approval granted for each waste source.

ATTACHMENT B

PLUGGING AND ABANDONMENT

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

(Operator Submitted Forms as Hard copies. Complete pages are included
with the Hard copy Of the Permit in Region V office)

ATTACHMENT C

FINANCIAL ASSURANCE MECHANISM

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

FINANCIAL ASSURANCE MECHANISM

Liquid Management, Inc. has demonstrated adequate financial responsibility to properly plug and abandon their Class I non-hazardous well. If Financial Statement Coverage is used as the financial mechanism to cover the cost of plugging the injection wells, this coverage must be updated on an annual basis.

ATTACHMENT D

CONTINGENT CORRECTIVE ACTION

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

CONTINGENCY PLAN FOR CORRECTIVE ACTION

There are no known artificial penetrations to the top of the injection zone or confining zone within the area of review. Based on the fact that no well exist to these depths, there does not exist any possibility for injection activities to have an impact on the USDW through other boreholes. Therefore, a corrective action plan is not required for any artificial penetrations within the Liquid Management, Inc. area of review. Should upward fluid migration be detected through the well bore of any previously unknown, improperly plugged, completed or abandoned well in the area of review due to injection of permitted fluid, injection will immediately cease and the USEPA will be notified as required in Part I(E) (12) (d) of this permit. A Corrective Action Plan shall then be submitted as required in Part I(I) (2) of this permit.

Should a well failure occur in the Liquid Management, Inc. injection well, the effected well would be shut-in, appropriate actions required by applicable regulations and permits would be followed regarding regulatory notifications and repairs. Single well capacity might be supplemented through waste shipment to licensed offsite facilities or plant operations would be curtailed to match disposal capacity.

The corrective action plan that would be proposed by Liquid Mangement, Inc. should upward fluid migration through the confining layer be detected in the wellbore will include the following:

1. Liquid Management, Inc. waste disposal well will be shut-in.
2. The USEPA, Region 5 UIC Branch and the Michigan Department of Natural Resources will be notified.
3. Following well shut-in, waste will be shipped to alternative permitted facilities for off-site treatment and disposal as necessary.
4. A contingency plan will be prepared as follows:
 - a. Locate well and identify present operator or owner, if any.
 - b. Identify mode of failure.
 - c. Prepare remedial plan outlining course of action.
 - d. The remedial plan will be submitted to the USEPA, Region 5 UIC Branch for approval.
 - e. Upon authorization, the remediation plan will be implemented.

ATTACHMENT E

CONSTRUCTION DETAILS

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

CONSTRUCTION DETAILS

Attached are diagrams of the well construction and wellhead schematic.

(Pages E-3 to E-4 are submitted by the operator and are with the hard copy of the draft permit in Region V office. No electronic copies are included here)

ATTACHMENT F

SOURCE AND ANALYSIS OF WASTE

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

ATTACHMENT F
SOURCE AND ANALYSIS OF WASTE

Source of Waste - Liquid Management, Inc. of Bay City, Michigan owns the existing Class I facility in the City of Pinconning, Michigan. This facility will be used to dispose of non-hazardous waste and wastes excluded from management under the Resource Conservation and Recovery Act as specified at Title 40 of the Code of Federal Regulations Section 261.4, provided the requirements in Part A, regarding new sources, have been met.

Limitation - Only approved non-hazardous waste, as specified in this attachment of this permit, generated by clients of Liquid Management, Inc. will be injected into the PCDW #1 well. All other fluids entering this well must be approved by the Director for purposes of well testing, stimulation, workovers or as buffer fluids.

Waste Analysis Plan - The approved plan is part of the administrative record for this permit and is included as part of this attachment.

ATTACHMENT G

LIST OF PRESENTLY APPROVED SOURCES

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

ATTACHMENT - G

List of Presently Approved "Sources"

Presently approved "sources" of waste for disposal into the PCDW #1 injection well are identified below by identification number, name, location, as well as sampling frequency and analytical parameters. Future "sources", as approved by the Director, will be added to this Part III(F) of the permit.

NON-HAZARDOUS WASTE FLUIDS¹

"Source" ID Number	"Source" Name	Location (Address)	Waste Analysis Parameters	Waste Sampling Frequency
1-CL1	IMI Pinconning Michigan Cheese Production Plant	Liquid Management, Inc. 122 South Water St. Pinconning, MI 48650	Toxicity ¹ characteristic List (see 40 CFR § 261.24)	Quarterly
1-CL1	IMI Pinconning Michigan Cheese Production Plant	Liquid Management, Inc. 122 South Water St. Pinconning, MI 48650	Fingerprint ²	Monthly
1-CL2	MDEQ (Former Osceola Refinery), West Branch, MI	MDEQ Saginaw Bay District 503 N. Euclid Ave Bay City, MI 48706	Toxicity ¹ Characteristic List (see 40 CFR § 261.24)	Quarterly
1-CL2	MDEQ (Former Osceola Refinery), West Branch, MI	MDEQ Saginaw Bay District 503 N. Euclid Ave Bay City, MI 48706	Fingerprint ²	Monthly

1. Non-hazardous waste fluid sampling parameters and frequencies shall be determined on a case specific basis, with some sources to be tested at a lesser frequency such as quarterly. In addition, a single source may require different analytical parameters to be tested at different frequencies (i.e., a landfill leachate may require Toxic Characteristic list testing on a quarterly basis. 2. The Fingerprinting parameters of the same source might be tested on a monthly basis). Minimum Fingerprinting analytical parameters are specified in Part III, Attachment - A of this permit.

ATTACHMENT H

REMOTE OPERATION

ENVIRONMENTAL PROTECTION AGENCY

PERMIT NUMBER MI-017-1I-C003

CLASS I COMMERCIAL NONHAZARDOUS

WELL PCDW #1

LIQUID MANAGEMENT, INC.

BAY CITY, MICHIGAN

ATTACHMENT H**Special Conditions Related to Remote Monitoring**

If this well is monitored remotely, the following special conditions shall be applicable:

For the purpose of this permit, remote monitoring is defined as injection into the well when a trained operator is not present on site property and able to perceive shut-down alarms and able to physically respond to the well controls or the wellhead within 15 minutes of a compliance alarm condition.

1. Local operating system and remote monitoring system: If remote monitoring is to be used to operate the well, an operating system and programmable logic controller shall be on-site and shall have a back-up power supply and an automatic pager designed to alert designated on-call, off-site personnel in the event of a well alarm or shut-in. The off-site operator shall be able to remotely access the operating system to verify well conditions and alarm status.
2. Response to alarms and automatic shut-ins: Alarm conditions related to permit compliance conditions of the well under Part II (B) (5) shall be investigated on-site by a trained operator within one (1) hour of pager notification of the occurrence.
3. Loss of power to the computer: In the event of a power failure beyond the capability of the back-up power supply shuts down the computer, the well shall be automatically shut-in.
4. Loss of dial tone: If the automatic pager cannot get a dial tone for 15 minutes, the well shall automatically be shut-in.
5. Restart of the well after an automatic shut-in: Restart of the well after an automatic shut-in related to a permit condition alarm (including, but not limited to, injection pressure, annulus differential pressure, loss of dial tone for more than 15 minutes or computer power failure) shall require the physical presence of the operator on-site before the well can be restarted.
6. Restart of the well after non-permit condition related or scheduled shut-ins: If the well is shut-in for more than 48 hours for circumstances unrelated to permit conditions, restart of the well shall require the physical presence of the operator on-site.
7. Weekly operator inspections: If fluid injection occurs during the period of any week and the well is being monitored remotely, a trained operator shall physically visit the site to inspect the facility at a minimum frequency of not less than once per week. This inspection shall verify the correct operation of the remote monitoring system by review of items such as, but not limited to, a comparison of the values shown on mechanical gauges with those reported by the remote operating system.
8. When not in use by a trained well operator, offloading connections shall be locked at the valves leading to waste water tanks so that access is restricted to trained well operators.

9. Offloading of waste from off-site sources can only occur with a trained operator physically present on site. An offsite waste related bound log book will be maintained documenting that a trained well operator allowed off-site waste to be unloaded. At a minimum, offsite waste log book entries are to include operator name, date, time, generator identification, approximate volume, and approved waste source identification number from the effective permit. The bound offsite waste log book(s) will be considered part of the plant monitoring records regarding the injection wells.



United States
Environmental Protection
Agency, Region 5

Water Division

77 West Jackson Boulevard
Chicago, Illinois 60604-3590
Mail Code WU-16J

Underground Injection Control Branch

PUBLIC NOTICE

APRIL 12, 2004

The United States Environmental Protection Agency (USEPA), Region 5 office, plans to issue injection well permit. This is your chance to send written comments on this draft permit for one Class I non-hazardous commercial waste disposal well.

The Safe Drinking Water Act (SDWA) requires us to regulate underground injection of fluids through wells to protect the quality of underground sources of drinking water. This is done in part by issuing permits to owners/operators of underground injection wells. The regulations governing underground injection wells are at Title 40 of the Code of Federal Regulations (40 CFR) Parts 144 and 146. The procedure for the permit process is at 40 CFR §124.5. More information about the UIC program is on the Internet at

<http://www.epa.gov/r5water/uic/uic.htm>.

FACTS-----

One existing Class I non-hazardous waste disposal well to be converted to commercial non-hazardous well owned and operated by Liquid Management, Inc. of Bay City, Michigan.

Bay County: SW 1/4, Section 23, T17N, R4E,
USEPA Draft Permit #MI-017-11-C003, (PCDW #1)

The well is located at Liquid Management, Inc. Pinconning Cheese Plant, 122 South Water Street Pinconning, Michigan. The injection is for commercial Class I non-hazardous waste .

Permit Writer: Mirza M. Baig (312) 886-2255. E-mail address: baig.mirzam@epa.gov via the internet.

You may see the draft permit for this well at: **Bay City Branch Library, 708 Centers, Bay City, Michigan; Monday-Thursday 9 a.m. to 9 p.m. , Friday-Saturday 8 a.m. to 5 p.m. and Sunday 1 p.m. to 4 p.m.**

This draft permit is also on the Internet at: <http://www.epa.gov/r5water/uic/uic.htm>.

Send your written comments to the Permit Writer at the Internet address listed above, or to this address.

**U.S. Environmental Protection Agency
DI Section (Attn: Lisa Perenchio)
77 West Jackson Boulevard, (WU-16J)
Chicago, Illinois 60604-3590**

We must receive your comments within 30 days after the date at the top of this notice. During the public comment period, you may request a public hearing in writing. You must state the issues you propose to raise at the hearing. If we receive many comments on these draft permit decisions, we will hold a hearing, and publish a notice of the hearing at least 30 days before the hearing. If there is a hearing, you may make your comments then. We will consider all comments received and then issue final permit decisions.

If you wish to visit the Region 5 office, please call the above Permit Writer first. The office is at the address listed above, and is open between the hours of 9 a.m. and 4 p.m. You may view the administrative record, including all data submitted by Liquid Management, Inc., at the Region 5 office.



